



INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification 7 :

H04L 12/56, 12/64, H04Q 11/04

A1

(11) International Publication Number:

WO 00/38375

(43) International Publication Date:

29 June 2000 (29.06.00)

(21) International Application Number: PCT/GB99/03748

(22) International Filing Date: 10 November 1999 (10.11.99)

(30) Priority Data:

9828144.7

22 December 1998 (22.12.98)

GB

(71) Applicant (for all designated States except US): POWER X LIMITED [GB/GB]; Stafford Court, 145 Washway Road, Sale, Cheshire M33 7PE (GB).

(72) Inventors; and

(75) Inventors/Applicants (for US only): JOHNSON, Ian, David [GB/GB]; 11 Seel Street, Moseley, Manchester OL5 0EW (GB). COLLINS, Michael, Patrick, Robert [GB/GB]; 53 Brompton Road, Rusholme, Manchester M14 7QA (GB). HOWARTH, Paul [GB/GB]; 14 Badby Close, Ancoats, Manchester M4 7EY (GB).

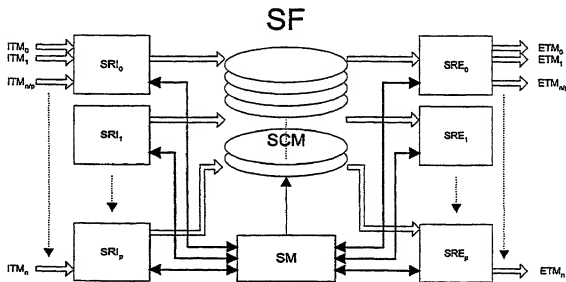
(74) Agents: MCNEIGHT, David, Leslie et al.; McNeight & Lawrence, Regent House, Heaton Lane, Stockport, Cheshire SK4 1BS (GB).

(81) Designated States: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).

Published

With international search report.

(54) Title: DATA SWITCHING METHOD AND APPARATUS



(57) Abstract

A data switch for handling packets of information switch comprises input traffic managers, ingress routers, a memoryless cyclic switch fabric, egress routers and output traffic managers all acting under the control of a switch controller. Each ingress router includes a set of virtual output buffers one for each output traffic manager and each message priority. Each data packet or cell as it arrives is examined to identify the output traffic manager address and its message priority. The switch controller uses a first arbitration and selection process to schedule the passage of the next cell across the switch fabric which the ingress router uses a second arbitration and selection process to select the appropriate virtual output queue for use in the switch fabric transfer.